

The Digital Source Collector

MDR Down Load

IMPORTANT

Ensure PC laptop is On, LIMSS-GAS application is Started, and interfacing cable and MIL-STD-1553 card is connected and configured

Task Steps:

1. Ensure Aircraft Battery is connected (Do not turn aircraft battery on).
2. Ensure PC is on with a MIL-STD-1553 card and LIMSS-GAS installed prior to PC start up.
3. Connect down load interfacing cable to the MIL-STD 1553 card and then to the "A" Bus Cable connector on the aircraft (Slide 4).
4. Start the LIMSS-GAS program (Slide 5).
5. Connect the down load cable power connector to the connector on the aircraft (Slide 4).

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MDR Down Load Procedures

6. Open the “Safety” menu and select “Down load only”. LIMSS-GAS will begin inventorying flight files (Slide 6).
7. Once the inventory is complete, select the flight (date/time) and then change the “Output Directory” to desired location (Desktop; New Folder). Then select the “Down Load” button in the lower right corner of screen (Slide 7, 8, 9 and 10).
8. Once the Down Load is complete, disconnect all the cables, close the LIMSS-GAS application and disconnect aircraft battery.
9. Successful selected down loaded ‘flight’; will produce four (4) binary (.BIN) files; A - audio, F - fixed, V - variable, and S - Safety. Preceding flights will normally produce only the F, V, and S BIN files. Note: The last and/or preceding flights may contain audio; if so, LIMSS-GAS will produce the flight

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MDR Down Load Procedures

10. E-mail the BIN files (F - fixed; V - variable; S - safety) along with a short description of the problem to: usarmy.rucker.hqda-secarmy.list.safe-dcai@mail.mil or William.F.Rhode.civ@mail.mil; Carl.J.Shea.civ@mail.mil Timothy.S.Ashcom.civ@mail.mil . The audio (A) BIN file is too large to send via e-mail. Use the following site to send: <https://safe.amrdec.army.mil/safe/> The Lab will process the data and return it to you.
11. If there is possibility damage to the MDR or the MDRs electrical system components and/or connections; then remove the MDR and send it to the CRC for down load and processing (mailing address is in DA Pam 385-40).

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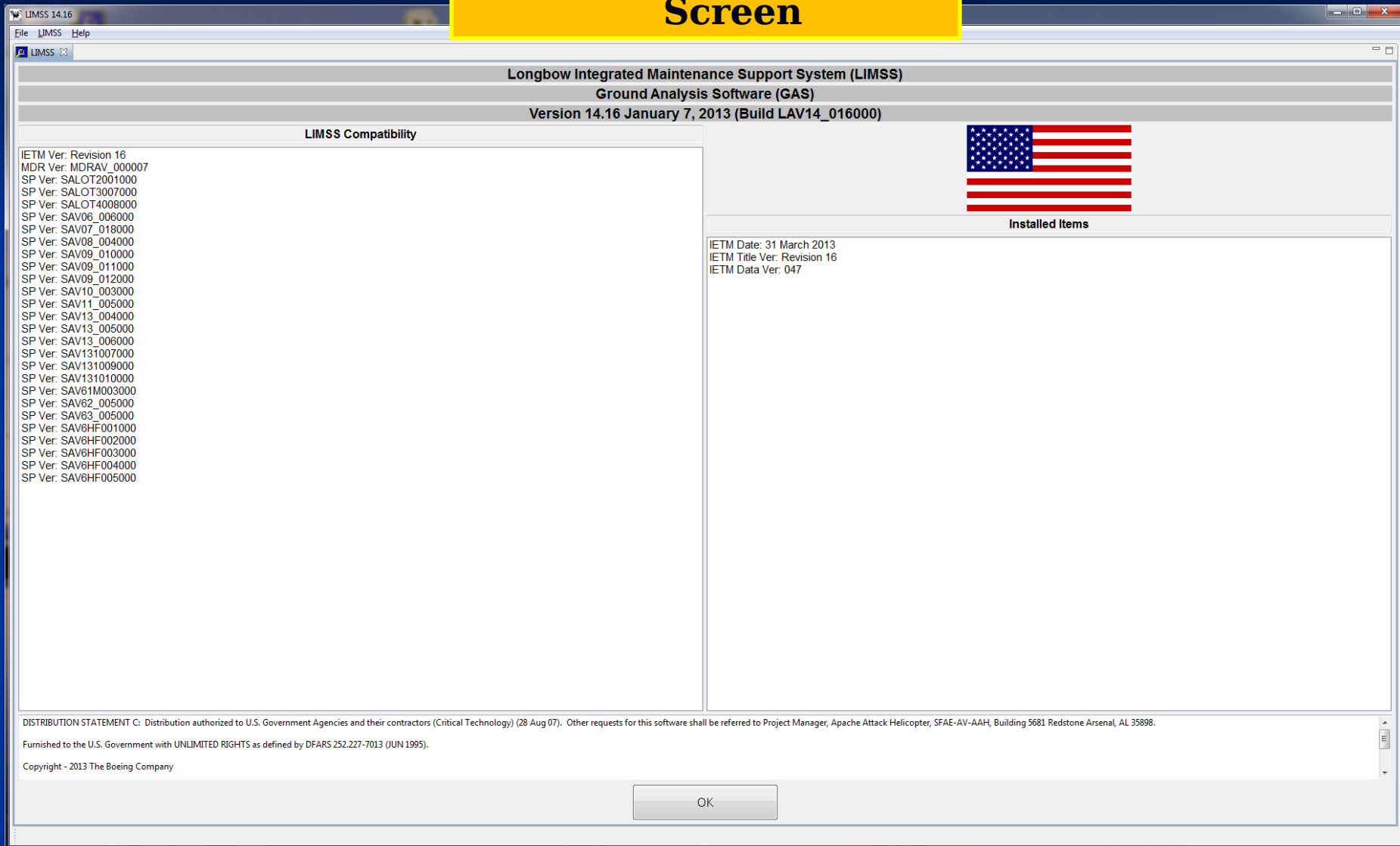
**Bus A
Connection**

**Power
Connection**



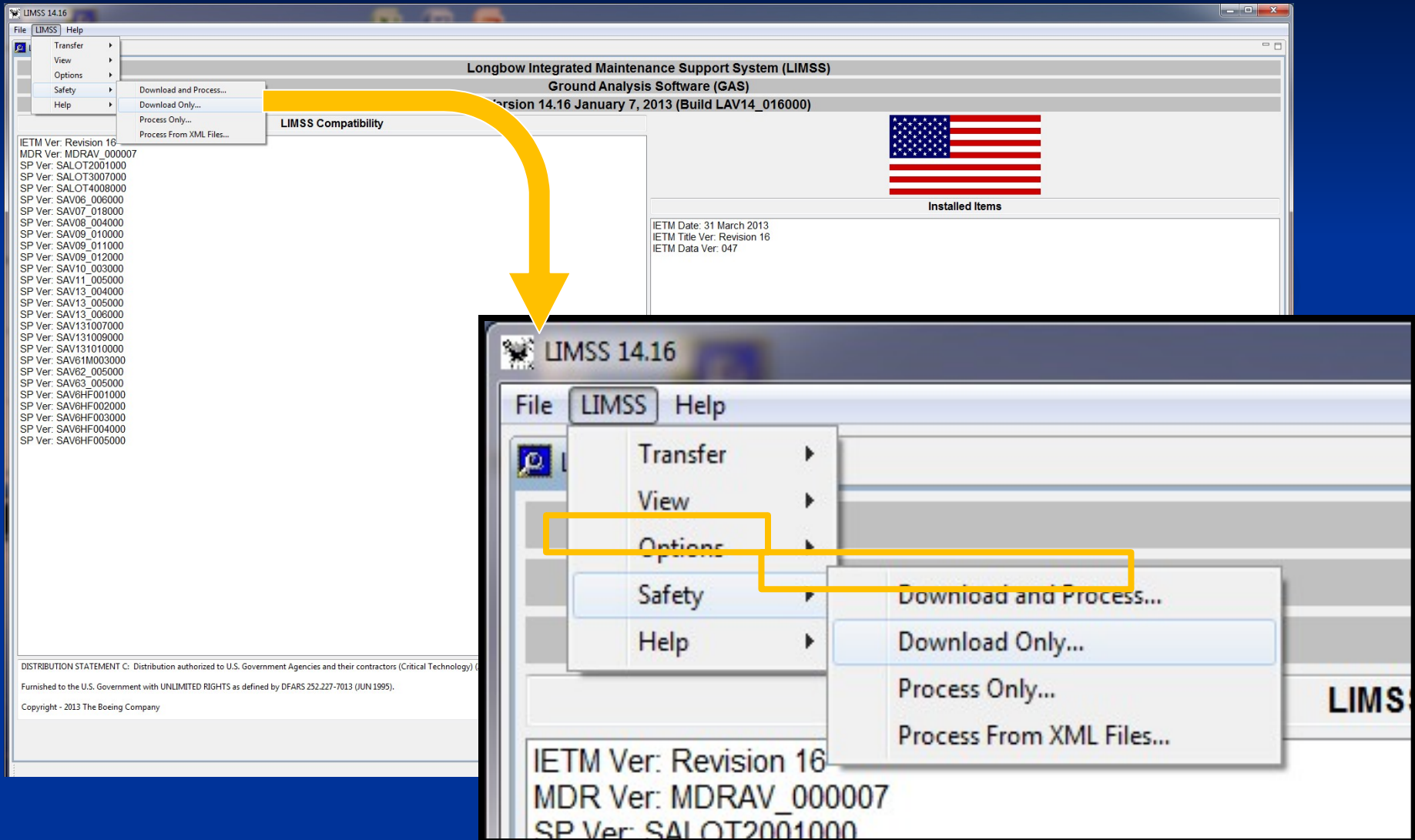
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LIMSS-GAS Main Screen



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Down Load



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Flight Inventory Page

LMSS 14.16

File LMSS Help

LMSS

Download Safety Data

Date	Time	Maint Avail	Safety Avail	Voice Avail	Est Minutes
04/09/2013	01:04:00	YES	YES	YES	10.5
04/08/2013	01:26:00	YES	YES	NO	2.0
04/07/2013	04:15:00	YES	YES	NO	3.1
04/07/2013	00:59:00	YES	YES	NO	0.9
04/06/2013	07:50:00	YES	YES	NO	0.8
04/06/2013	07:40:00	YES	YES	NO	0.0
04/06/2013	04:06:00	YES	YES	NO	0.5
04/05/2013	11:38:00	YES	YES	NO	0.0
04/05/2013	10:54:00	YES	YES	NO	0.0
04/05/2013	06:21:00	YES	YES	NO	0.1
04/05/2013	05:52:00	YES	YES	NO	0.0
04/04/2013	04:39:00	YES	YES	NO	1.9
04/04/2013	01:10:00	YES	YES	NO	0.6
04/03/2013	01:47:00	YES	YES	NO	2.2
04/01/2013	00:31:00	YES	YES	NO	0.0
03/31/2013	11:11:00	YES	YES	NO	0.2
03/31/2013	06:13:00	YES	YES	NO	0.1
03/30/2013	06:09:00	YES	YES	NO	0.6
03/30/2013	05:40:00	YES	YES	NO	0.0
03/30/2013	03:59:00	YES	YES	NO	0.0
03/29/2013	07:17:00	YES	YES	NO	1.0
03/29/2013	00:29:00	YES	YES	NO	2.0
03/28/2013	14:51:00	YES	YES	NO	0.0
03/28/2013	10:08:00	YES	YES	NO	0.0
03/27/2013	23:42:00	YES	YES	NO	3.1
03/27/2013	21:02:00	YES	YES	NO	0.0
03/27/2013	11:25:00	YES	YES	NO	0.0
03/27/2013	06:39:00	YES	YES	NO	2.0
03/27/2013	01:54:00	NO	YES	NO	0.4
03/25/2013	02:38:00	NO	YES	NO	0.0
03/25/2013	02:32:00	NO	YES	NO	0.0
03/23/2013	04:22:00	NO	YES	NO	1.3
03/23/2013	02:22:00	NO	YES	NO	0.3
03/23/2013	02:07:00	NO	YES	NO	0.0
03/21/2013	12:41:00	NO	YES	NO	0.0
03/21/2013	12:34:00	NO	YES	NO	0.0
03/21/2013	12:02:00	NO	YES	NO	0.0
03/21/2013	11:27:00	NO	YES	NO	0.0
03/21/2013	05:12:00	NO	YES	NO	0.4
03/20/2013	16:03:00	NO	YES	NO	0.0
03/20/2013	11:34:00	NO	YES	NO	0.0

Output Dir: C:\Users\dcaillab\Desktop\Test\

Change Output Dir

< Back Select / Deselect All Download

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Flight Selection, Output Directory, and Download

Download Safety Data

Date	Time	Maint Avail	Safety Avail	Voice Avail	Est Minutes
04/09/2013	01:04:00	YES	YES	YES	10.5
04/08/2013	01:26:00	YES	YES	NO	2.0
04/07/2013	04:15:00	YES	YES	NO	3.1
04/07/2013	00:59:00	YES	YES	NO	0.9
04/06/2013	07:50:00	YES	YES	NO	0.8
04/06/2013				NO	0.0
04/06/2013				NO	0.5
04/05/2013				NO	0.0
04/05/2013				NO	0.0
04/05/2013	06:21:00	YES	YES	NO	0.1
04/05/2013	05:51:00	YES	YES	NO	0.0
04/04/2013	04:39:00	YES	YES	NO	1.9
04/04/2013	01:10:00	YES	YES	NO	0.6
04/03/2013	01:47:00	YES	YES	NO	2.2
04/01/2013	00:31:00	YES	YES	NO	0.0
03/31/2013	11:11:00	YES	YES	NO	0.2
03/31/2013	06:13:00	YES	YES	NO	0.1
03/30/2013	06:09:00	YES	YES	NO	0.6
03/30/2013	05:40:00	YES	YES	NO	0.0
03/30/2013	03:59:00	YES	YES	NO	0.0
03/29/2013	07:17:00	YES	YES	NO	1.0
03/29/2013	00:29:00	YES	YES	NO	2.0
03/28/2013	14:51:00	YES	YES	NO	0.0
03/28/2013	10:08:00	YES	YES	NO	0.0
03/27/2013	23:42:00	YES	YES	NO	3.1
03/27/2013	21:02:00	YES	YES	NO	0.0
03/27/2013	11:25:00	YES	YES	NO	0.0
03/27/2013	06:39:00	YES	YES	NO	2.0
03/27/2013	01:54:00	NO	YES	NO	0.4
03/25/2013	02:38:00	NO	YES	NO	0.0
03/25/2013	02:32:00	NO	YES	NO	0.0
03/23/2013	04:22:00	NO			1.3
03/23/2013	03:39:00	NO			0.3
03/23/2013					0.0
03/21/2013					0.0
03/21/2013					0.0
03/21/2013					0.0
03/21/2013	11:27:00	NO			0.0
03/21/2013	05:12:00	NO			0.4
03/20/2013	16:03:00	NO			0.0
03/20/2013	11:34:00	NO	YES	NO	0.0

Output Dir: C:\Users\dcailab\Desktop\Test\

Step 1: Select Flight (highlight).

Step 2: Change Output Directory to Desired Location.

Step 3: Select "Download" button.

Buttons: < Back, Select / Deselect All, Download, Change Output Dir

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Aircraft Tail Number

The screenshot shows the LIMSS 14.16 application window titled 'Download Safety Data'. The main window has a menu bar (File, LIMSS, Help) and a toolbar. Below the toolbar, there are three sections: 'Current Task', 'Current Flight', and 'Total'. The 'Current Task' section shows 'Get Tail Number' with a progress bar at 30% and an 'Estimated Time Remaining' of 00:00:06. The 'Current Flight' section shows 'Flight: 1 of 1 Tail: 0 mA Time: 04/09/2013 01:04:00' and an 'Unknown' status. The 'Total' section shows 'Download Previously Downloaded Flights' and an 'Unknown' status. Overlaid on the main window is a 'Confirm Aircraft Tail Number' dialog box. This dialog box has a title bar with a close button. It contains three input fields: 'Current Flight' (04/09/2013 01:04:00), 'MDR Reported Tail Number' (??????), and 'Designate Tail Number For This Flight' (a dropdown menu showing '??????'). Below these fields is a checkbox labeled 'Apply to all flights with this MDR data'. At the bottom of the dialog box are three buttons: 'OK', 'Skip', and 'Cancel'. A yellow line connects the 'OK' button to the text in the instruction box below.

Step 4: The 'Confirm Aircraft Tail Number' window will appear; confirm tail number and select 'OK'. Note: If no tail number listed, enter the seven (7) digit aircraft tail number.

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Status of Downloaded Flight

Step 5: The 'Download Flights' window will appear and provide the Flight Downloaded results; select 'OK' if results are successful. If unsuccessful, then troubleshoot. Contact the USACRC, DCAI Lab if unable to successfully download flight files.

The screenshot displays the LIMSS 14.16 application window. The main window shows a table of flight data with columns for date, time, and status. A 'Download Flights' dialog box is open in the center, displaying a large green checkmark and the text '1 Flight Found' and 'Net Result: 1 Flight Downloaded'. The 'OK' button is highlighted with an orange box. The background table lists various flight records, including dates from 03/20/2013 to 04/03/2013 and times ranging from 00:31:00 to 16:03:00. The status column shows 'NO' for most entries and 'YES' for some. The bottom of the window features buttons for '< Back', 'Select / Deselect All', 'Download', and 'Change Output Dir'.

Date	Time	Status
04/03/2013	04:39:00	NO
04/03/2013	01:10:00	NO
04/03/2013	01:47:00	NO
04/01/2013	00:31:00	NO
03/31/2013	11:11:00	NO
03/31/2013	06:13:00	NO
03/30/2013	06:09:00	NO
03/30/2013	05:40:00	NO
03/30/2013	03:59:00	NO
03/29/2013	07:17:00	NO
03/29/2013	00:29:00	NO
03/28/2013	14:51:00	NO
03/28/2013	10:08:00	NO
03/27/2013	23:42:00	NO
03/27/2013	21:02:00	NO
03/27/2013	11:25:00	NO
03/27/2013	06:39:00	NO
03/27/2013	01:54:00	NO
03/25/2013	02:38:00	NO
03/25/2013	02:32:00	YES
03/23/2013	04:22:00	YES
03/23/2013	02:22:00	YES
03/23/2013	02:07:00	YES
03/21/2013	12:41:00	YES
03/21/2013	12:34:00	YES
03/21/2013	12:02:00	YES
03/21/2013	11:27:00	YES
03/21/2013	05:12:00	YES
03/20/2013	16:03:00	YES
03/20/2013	11:34:00	YES